



United States Department of Agriculture

2RESEARCH, EDUCATION, AND ECONOMICS
AGRICULTURAL RESEARCH SERVICE
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"Solving Problems for the Growing World"

VACANCY ANNOUNCEMENT

Announcement Number: ARS-X5E-0322

Position Title/Series/Grade:

Electronic Industrial Controls Mechanic (Plumbing)
WG-2606-10

Promotion Potential: WG-10

Employment Type: Full-time - Permanent

Grade and Salary Range:

WG-10 \$21.24 - \$24.82 Per Hour

Location of Position:

Facilities Services
Systems Maintenance Branch
Service Request Team
Beltsville, MD

Who Can Apply (You **must** include a statement in your application that you are a U.S. citizen to be considered for this position): All U.S. Citizens

Opening Date: August 29, 2005

Closing Date: Open Until Filled (First cut-off date will be September 23rd with subsequent cut-off dates every three weeks)

For copies of vacancy announcements and/or application materials, please call (301) 504-1482. For additional information regarding employment opportunities, please visit <http://www.afm.ars.usda.gov/hrd/jobs/apply.htm>.

Contact Information

Human Resources Specialist:

Susan Mooring
(301) 504-1360

DC Relay Service: (202) 855-1234 (TDD)

Send Applications to:

USDA, Agricultural Research Service
Human Resources Division
Attn: Susan Mooring
5601 Sunnyside Avenue, Stop 5104
Beltsville, MD 20705-5104

Fax: (301) 504-1535

E-mail: scirecruit@ars.usda.gov

Applications must be received, e-mailed or faxed by the cut-off date of the announcement, to be considered within that cut-off period. Applications received in Government envelopes will not be considered.

Please take advantage of the Application Package Checklist at the end of this announcement to ensure your application is complete.

Applications will also be accepted from USDA Surplus and Federal Displaced Employees in the commuting area.

Applications must be received, e-mailed or faxed by the cut-off date of the announcement, to be considered within that cut-off period.

Major Duties:

The selectee will install, maintain, modify and repair various types of electronically controlled systems and equipment that are characterized by moderate complexity of design, construction and function. Duties will include:

- installing, repairing, adjusting and improving Direct Digital Control (DDC) programming to include lighting, irrigation, building HVAC systems, and greenhouse control systems and alarms;
- testing fiber optic cables, terminations and modems using test and repair equipment necessary to maintain network functionality and reading circuit descriptions, schemates and layout sheets; tests and calibrates a variety of instruments;
- rewiring and replacing electrical cords, setting-up of laboratory equipment, i.e., incubators, sterilizers, high and moderate speed centrifuges, vacum pumps, water baths and stills, central facility reverse osmosis water and laboratory filter purification systems, compressed gas regulation systems, personal computer interfaces, adjusting programmable logistical controllers, etc.
- installing copper water lines ranging in size from 3/8 to 4 inches; repairs broken water lines of all sizes in facilities buildings;
- installing cold and hot water circulating lines and waste lines to the plumbing fixtures and determines where to tap or cut into;
- installing steam stations consisting of strainer, valves, reducers, unions and gauges;
- troubleshooting and repairing defects in piping systems;
- installs and repairs relief valves, check valves, pressure regulators, modulating valves, expansion joint, etc.
- training laboratory personnel on proper care and use of equipment.

Working Conditions and Other Considerations:

Work is usually performed insided in well lighted, heated and ventilated areas. When equipment is fixed in place, it is sometimes necessary to work in warehouse-type or industrial areas exposed to loud noises, heat or cold, fumes, etc. Subject to injuries such as electric shock, cuts and bruises, as well as burns. Work is also performed in hot and cold temperatures both within and outside buildings and in tunnels, and in hot, wet, muddy places, including barnyards and other unsanitary places. Is subject to burns, scalds, blowouts, abrasions and possible infections due to unsanitary conditons.

Incumbent frequently lifts, carries or handles items weighing up to 40lbs. (and occasionally heavier weights). Assistance is usually available with heavy items. Works in a sitting position for extended periods. Frequent standing, walking, bending, crouching, reaching and stooping are required. On occasion, may climb to work in high places.

Qualifications Required: Your education and experience will be evaluated against all qualification requirements (basic and any additional requirements) listed below.

Basic Requirements

1. Ability to do the work of an Electronic Industrial Controls Mechanic (Plumbing) without more than normal supervision
2. Knowledge of equipment assembly, installation, repair, etc., for electronics equipment (or similar types) serviced in the work of this position.
3. Ability to use a variety of test equipment, power and hand tools used in the type of work in this position.
4. Knowledge of the principles, basic functions and applications of electronics theory.
5. Ability to troubleshoot electronic circuits, components, equipment, etc., and determine method of repair.

If qualifying all or in part based on your education, please submit a copy of your college transcripts OR a list of college courses with credit hours, dates completed, and grades received. If this information is not provided, your education may not be appropriately evaluated and you may lose consideration for this position. If your qualifications are based in any part on education and you are selected for this position, you will have to provide an official copy of your academic transcripts prior to entering on duty.

Additional Requirements:

Must possess and maintain a valid state driver's license.

Must possess or be able to obtain within 120 days of employment, a Universal CFC Certification for Refrigerants and Recycling.

Do you currently possess a Universal CFC Certification for Refrigerants and Recycling?

_____ Yes _____ No

Must possess or be able to obtain within 60 days of employment, a Back Flow Prevention Device Tester Technician Certification.

Do you currently possess a Back Flow Prevention Device Tester Technician Certificate?

☐ Yes ☐ No

A PHYSICAL EXAMINATION IS REQUIRED FOR ALL APPOINTEES NEW TO THE FEDERAL GOVERNMENT

SUPPLEMENTAL QUESTIONNAIRE

Applicants are required to complete the attached supplemental questionnaire. Applicants who fail to complete and return the questionnaire will not receive further consideration.

SUPPLEMENTAL QUESTIONNAIRE

Electronic Industrial Controls Mechanic (Plumbing), WG-2606-10

ARS-X5E-0322

Note to applicant: Information presented will be used to rate your application. You cannot be given credit for work you do not document. All questions must be answered. Questions not answered will be considered to indicate that you have not performed that particular work assignment.

1. Ability to do the work of an Electronic Industrial Controls Mechanic (Plumbing) without more than normal supervision.

1a. Indicate on the blank line, the answer that best describes your level of independence for each trade listed.

A. Able to perform task under close supervision.

B. Able to perform task under general supervision.

C. Able to perform task independently, only needing assistance for unusual problems

D. Able to perform task independently

E. Able to provide instruction and guidance to others

F. No experience

___ heating and ventilation systems operations, installation, and/or repair

___ air conditioning systems operations, installation, and/or repair

___ electrical work

___ pipefitting

___ plumbing

___ lighting systems installation, maintenance, and/or repair

___ irrigation systems operation, installation, and/or repair

___ greenhouse systems operation, installation and/or repair

___ Other trades work (Please specify.):

1b. Do you have a currently valid state driver's license? ___ Yes ___ No
(If yes, please include a copy.)

1c. Do you currently have Universal CFC Certification for Refrigerants and Recycling?
___ Yes ___ No (If yes, please include a copy.)

1d. Do you currently have a Back Flow Prevention Device Tester Technician Certificate? ___ Yes ___ No
(If yes, please include a copy.)

If no, you must be able to obtain the certification within 60 days of employment.

1e. I am able to lift and carry items weighing 40 pounds without assistance. ___ Yes ___ No

2. Knowledge of equipment assembly, installation, repair, etc. for electronics equipment (or similar types) serviced in the work of this position.

2a. *Please indicate on the blank line, the level of knowledge and experience you have with the following types of electronically-controlled equipment with respect to assembly, installation, repair and other aspects of various types of equipment. Feel free to add any additional information that may amplify your knowledge or experience.*

A – I have no knowledge or experience of this type of system.

B – I have knowledge (through education or training) but no experience working with this type of system.

C – I have worked with this type of system to do minor repairs and/or routine maintenance but need assistance to do unfamiliar tasks.

D – I have assembled, installed, and/or repaired this type of system using my own judgment and initiative.

E – I have experience in handling independently the most complex or difficult aspects of the assembly, installation, and/or repair of this type of system; and/or I instruct others in the assembly, installation, and/or repair of this type of system.

___ electronically-controlled lighting systems

___ electronically-controlled irrigation systems

___ electronically-controlled heating systems

___ electronically-controlled ventilation systems

___ electronically-controlled air conditioning systems

___ electronically-controlled water distribution systems

___ electronically-controlled greenhouse control systems

___ electronically-controlled fire and other alarm systems

___ electronically-controlled laboratory or other specialized equipment (Please specify type(s).):

___ other types of electrical equipment

___ commercial or industrial plumbing equipment

___ hydraulic equipment (such as valve gate & closures, hydraulic motors, etc.)

___ pneumatic equipment (such as HVAC controllers, etc.)

___ mechanical equipment (such as Variable Air Volume controllers, etc.)

___ Knowledge and experience of assembly, installation, and/or repair with other types of electronically-controlled systems (please specify and include brand, e.g., Siemens, Q-Com, etc.):

___ Ability to read and work from blueprints, sketches and specifications

___ Skill to use shop drawings and layout methods and techniques

3. Ability to use a variety of test equipment, power, and hand tools used in the type of work in this position.

Please indicate on the blank line, the statement that best describes your experience level as it relates to the use of each type of test equipment or tool. Feel free to add any additional information that may amplify your qualifications.

A I have not used this type of tool or piece of test equipment.

B I am able to perform the simplest and/or most routine tasks on my own using this type of tool or piece of test equipment.

C I am able to use this tool or piece of test equipment to perform skilled work up to the journeyman level with supervisory guidance or assistance.

D I am able to use this tool to perform common tasks typical of the journeyman level without supervisory advice and guidance. For test equipment, I understand how and for what purposes this equipment is used, I am able to recognize normal parameters, and can identify abnormal readings and take appropriate action.

E I am able to use this tool or piece of test equipment for the most complex types of work (for example, for work requiring extreme precision or caution, fabrication work, work on miniaturized components, etc.); and/or I regularly instruct others in its use.

___ voltmeters

___ ammeters

- ___ voltage test light
- ___ anemometer
- ___ micrometers
- ___ digital multimeters
- ___ clamp on amp meter
- ___ infrared thermometer
- ___ motor megometer
- ___ phase sequence indicator meter
- ___ captive air hood-balometer
- ___ air flow meter
- ___ air conditioning circuit tracer
- ___ refrigerant leak detector
- ___ digital manometer
- ___ synchrosopes and/or frequency meters
- ___ spectrum analyzers
- ___ power measuring instruments
- ___ ohmmeters
- ___ flow hoods
- ___ hand-held analyzers
- ___ laptops or modems (to test or troubleshoot direct digital controls)
- ___ desktop personal computer
- ___ Direct Digital Control operating system
- ___ calipers
- ___ graduated cylinders
- ___ gauges
- ___ hand pipe threader
- ___ hydrostatic pump
- ___ power snake
- ___ pipe wrenches 4" to 72"
- ___ pipe reamer
- ___ oxy-acetylene torch
- ___ acetylene torch (prestolite)
- ___ power saw
- ___ Other types of test equipment (please specify.):

- ___ Other tools (please specify):

4. Knowledge of the principles, basic functions, and applications of electronics theory.

4a. Please describe any education or training you have had with respect to electronics theory. Attach copies of transcripts or lists of course work.

4b. Please indicate, on the blank provided, the answer that most closely indicates your level of knowledge and experience with the following aspects of electronic theory.

A - I have no knowledge or experience of this aspect of electronics theory.

B - I have training or education, but no on-the-job experience with this aspect of electronics theory.

C - I am able to do the common tasks of the trade, but I have had no theoretical training in this area.

D- I am able to perform most of the journeyman-level tasks that require this type of theoretical knowledge.

E - I am able to perform tasks requiring an expert-level (i.e., prototype or experimental type of work) and/or thorough knowledge (i.e., for the most complex tasks associated with the work and/or to instruct others).

- ___ electrical/electronic diagrams, schematics and layout sheets

- ☐ solid state diode theory
- ☐ pulse-forming networks
- ☐ conductors and insulators
- ☐ transformers
- ☐ generators
- ☐ voltage and current comparison networks
- ☐ simple logic circuitry
- ☐ semiconductor devices and analog theory
- ☐ integrated circuit theory
- ☐ digital circuit theory
- ☐ electromagnetic theory
- ☐ Other aspects of electronic theory (Please specify.):

5. Ability to troubleshoot electronic circuits, components, equipment, etc. , to determine method of repair.

5a. Please check the statement that most closely matches your ability and experience level in troubleshooting this type of equipment.

☐ I have no experience troubleshooting this type of equipment.

☐ I am regularly able to diagnose simple problems and fix them where this involves only the most routine solutions.

☐ I am regularly able to find, diagnose, and fix a range of problems typical of the journeyman level with close supervisory assistance and advice.

☐ I am regularly able to find, diagnose, and fix the full range of problems typical of the journeyman level generally without supervisory advice and assistance.

☐ I am regularly able to find, diagnose, and fix the most difficult types of problems, such as those that require a thorough knowledge of the systems involved, or where other workers have not been able to do so.

5b. Please provide one or more examples of the most complex types of equipment, problems, and solutions you have encountered in troubleshooting types of equipment associated with this work.

Are you a U.S. citizen? ☐ Yes ☐ No

I certify, to the best of my knowledge and belief, all of the information on and attached to this application is true, correct, complete, and made in good faith. I understand that false or fraudulent information on or attached to this application may be grounds for not hiring me or for firing me after I begin work, and may be punishable by fine or imprisonment. I understand that any information I give may be investigated.

Signature

Date

Other Important Information

Benefits Package:

A Benefits Package is authorized for this position. Additional information about Federal benefits can be obtained at www.usajobs.opm.gov/ei61.htm.

Veteran's Preference:

For further details, call the U.S. Office of Personnel Management (OPM) at 703-724-1850 or TDD 978-461-8404. Select General Information on the Federal Employment Policies and Procedures, and then Veterans Preference and Special Appointing Authorities for Veterans. Visit their VetGuide website at <http://www.opm.gov/veterans/html/vetguide.asp>.

Relocation Expenses:

Payment of relocation expenses will be determined in accordance with P&P 412.5, Recruitment and Retention Incentives and Other Special Pay, Sections 6 and 7, as amended by Bulletins 03-402 and 05-412.5, which may be found at <http://www.afm.ars.usda.gov/ppweb/412-05.htm#H10>. See also http://www.afm.ars.usda.gov/hrd/staffing_recruit/reloweb.htm.

Financial Disclosure Requirement:

Federal employees are subject to prohibitions against officially dealing with outside organizations in which they have a financial interest. You may be required to submit a financial disclosure report if hired for this position.

False statements:

If you make a false statement in any part of your application, you may not be hired; may be fired after beginning work; or may be fined or jailed.

Optional Form 306, (Declaration for Federal Employment):

If you are selected for this position, you will be required to complete this form before an offer may be made.

USDA Surplus/Federal Displaced Employees:

USDA Surplus/Federal displaced employees must submit documentary evidence of eligibility. Well qualified surplus and displaced employees within the local commuting area will receive selection priority as provided by OPM regulations. Well-qualified means the applicant meets the basic qualification and eligibility requirements and all selective placement factors; is rated above minimally qualified against the KSAs or quality criteria; and is able to satisfactorily perform the duties of the position upon entry. Applicants must submit the following:

- 1) a copy of your RIF Separation Notice or Certification of Expected Separation or other documentation indicating that you are a surplus employee;
- 2) evidence of full performance level of current position;
- 3) a copy of your most recent performance appraisal; and
- 4) a copy of your most recent SF-50, Notification of Personnel Action, to verify reassignment eligibility.

Selective Service System:

Males over age 18 who were born after December 31, 1959, must have registered with the Selective Service System (or have an exemption) to be eligible for Federal employment.

Reasonable Accommodation:

Reasonable accommodation may be provided to applicants with disabilities. If you need a reasonable accommodation for any part of the application and hiring process, or have questions regarding reasonable accommodation and/or accessibility for any part of the application and hiring process, please contact the Disability Program Manager on 202-720-6161 or through the DC Relay Service on 202-855-1234 (TDD). The decision to grant reasonable accommodation is made on a case-by-case basis.

Civil Rights Policy Statement:

The U.S. Department of Agriculture (USDA) is an equal opportunity employer and provider. Discrimination is prohibited in all USDA programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's Target Center on 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410 or call 202-720-5964 (voice and TDD).

Application Package Checklist

If application packages do not contain all of the requested information, you may lose consideration for the job. To help you ensure your application fully outlines your qualifications and eligibility for this position, please submit the following documentation.

- ☐ Optional Form 612 (Optional Application for Federal Employment), SF-171 (Application for Federal Employment), Resume, Curriculum Vitae, or other document outlining your qualifications (Go to <http://www.opm.gov/forms/html/of.asp> and scroll down to obtain the OF-612).

The following information is required of all applicants:

- ☐ Announcement number, title, and grade(s) of the position
- ☐ Full name, mailing address (including zip code) and day and evening phone numbers (with area code)
- ☐ Social security number
- ☐ Statement that you are a U.S. citizen (if not using the OF-612 or SF-171)
- ☐ Copy of DD Form 214 (Certificate of Release or Discharge from Active Duty) (if claiming veterans preference) (Visit the following web site for additional information:
<http://www.opm.gov/employ/veterans/html/vetguide.asp>)
- ☐ SF-15 (Application for 10-point Veteran's Preference) plus the support documentation required by this form (if claiming 10-point veterans preference) (Go to the web site at <http://www.opm.gov/forms/html/sf.asp> to obtain form.)
- ☐ Paid and non-paid work experience related to the position. For each period of work experience include:
 - ___ Job title
 - ___ Series/grade (if Federal employment)
 - ___ Duties and accomplishments
 - ___ Employer's name and address
 - ___ Supervisor's name and contact information
 - ___ Starting and ending dates of employment (at least month & year)
 - ___ Number of hours worked per week
 - ___ Salary
 - ___ Indicate if we may contact current supervisor/employer
- ☐ Other job related information, such as training courses (title & year); skills (e.g., other languages, computer software/hardware, tools, etc.)
 - ___ Certificates/licenses (current)
 - ___ Honors, awards, and special accomplishments
 - ___ Supplemental questionnaire if applicable (usually for Federal Wage System positions - WG, WL, WS)
- ☐ Copy of college transcripts (if qualifying all or in part on the basis of education for this position) (If you have non-conventional education, e.g., foreign study, continuing education units, life experience, etc., go to the web site at <http://www.opm.gov/qualifications/SEC-II/s2-e4.htm#e4a> and look under the heading

“Other Education” for information governing acceptability of this type of education.)

- ☐ Copy of SF-50 (Notification of Personnel Action) to verify possession of competitive civil service status (if you are a current or previous federal employee)
- ☐ Copy of most recent performance appraisal (if you are a current federal employee)
- ☐ Second copy of application package (if the position is open to candidates outside the federal government AND if you are a current federal employee or a candidate with reinstatement eligibility and wish to be considered under both merit promotion and competitive examining procedures).
- ☐ Support documentation for eligibility for special hiring authorities, such as disability, Peace Corps service, etc. (If you have questions about whether you are eligible for a particular hiring authority, please call the servicing HR specialist or visit the web site at <http://www.usajobs.opm.gov/a2.htm> and scroll down to the subject heading, “Category”.)
- ☐ Support documentation if you are a USDA surplus or federal displaced employee (See pertinent section under “Other Important Information” below.)
- ☐ Self-certification of typing speed (if required as a basic qualification for the position)
- ☐ While not required, a separate response to the required knowledge, skills, and abilities (KSAs listed under Specialized Experience) and Selective Placement Factor(s), if present, for this position may better highlight your specific qualifications for this position. (For an explanation of KSAs, go to the web site at <http://www.ars.usda.gov/careers/whatksa.html>).

If this is your first time applying for a federal job, or if you wish to view more detailed information about various aspects of applying for federal jobs, go to <http://www.opm.gov/forms/html/of.asp> and scroll down to access the Office of Personnel Management (OPM) Optional Form 510.